# Highly Scalable Software-Based Architecture For Communication And Cooperation Among Distributed Electronic Agents

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## BACKGROUND OF THE INVENTION

### Cross-Reference To Related Applications

This is a Continuation application of co-pending U.S. Patent Application No. 09/225,198 (Attorney Docket No. SRI1P016/BRC), filed January 5, 1999, which co-pending application is incorporated herein by reference in its entirety

### Field of the Invention

The present invention is related to distributed computing environments and the completion of tasks within such environments. In particular, the present invention teaches a variety of software-based architectures for communication and cooperation among distributed electronic agents. Certain embodiments teach interagent communication languages enabling client agents to make requests in the form of arbitrarily complex goal expressions that are solved through facilitation by a facilitator agent.

### Context and Motivation for Distributed Software Systems

The evolution of models for the design and construction of distributed software systems is being driven forward by several closely